

## Appendix B

### Polymer Density Determination

Using the AccuPyc 1330 gas displacement pycnometer, a total of 3 separate polymer samples were tested. Each test consists of 5 separate purges in which the volume of He gas is measured and the final result given as an average of the five readings. Volume determinations are converted into density values from the initial mass of polymer determined earlier using a Denver Instruments Microbalance (+/- 0.001 g). All tests were performed at ambient temperature.

<b>Sample:</b>	<b>Run #</b>	<b>Density (g/cm<sup>3</sup>)</b>	<b>Deviation (g/cm<sup>3</sup>)</b>
410-25-1	1	1.1205	-0.0001
mass: 0.3236 g	2	1.1205	-0.0001
	3	1.1205	-0.0001
	4	1.1211	-0.0005
	5	1.1204	-0.0002
	Ave:	1.1206	0.0003

410-25-2	1	1.1205	0.0002
mass: 0.3226 g	2	1.1199	-0.0004
	3	1.1208	0.0006
	4	1.1200	-0.0002
	5	1.1200	-0.0002
	Ave:	1.1203	0.0004

410-25-3	1	1.1208	-0.0002
mass: 0.3220	2	1.1210	0.0000
	3	1.1207	-0.0002
	4	1.1209	-0.0001
	5	1.1214	0.0005
	Ave:	1.1214	0.0005

410-25-4	1	1.1225	0.0005
mass: 0.3943	2	1.1217	-0.0004
	3	1.1226	0.0005
	4	1.1219	-0.0001
	5	1.1215	-0.0005
	Ave:	1.1220	0.0005

410-25-5	1	1.1220	-0.0001
mass: 0.3499	2	1.1225	0.0003
	3	1.1224	0.0002
	4	1.1217	-0.0004
	5	1.1222	0.0000
	Ave:	1.1222	0.0003

Total Average:	1.121 g/cm <sup>3</sup>	0.001 g/cm <sup>3</sup>
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